AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0051] of US 2006/0088836 with the following amended paragraph:

FIG. 2: **FIG. 2** depicts the components of an automated RNA preparation machine. A primary component of the device is a centrifuge. (A.) Tubes of whole blood containing a density gradient solution, transcription/translation inhibitors, and a gel barrier that separates erythrocytes from mononuclear cells and serum after centrifugation are placed in the centrifuge. (B.) The barrier is permeable to erythrocytes and granulocytes during centrifugation, but does not allow mononuclear cells to pass through (or the barrier substance has a density such that mononuclear cells remain above the level of the barrier during the centrifugation). After centrifugation, the erythrocytes and granulocytes are trapped beneath the barrier, facilitating isolation of the mononuclear cell and serum layers. A mechanical arm removes the tube and inverts it to mix the mononuclear cell layer and the serum. (C.) The arm next pours the supernatant into a fresh tube (D.), while the erythrocytes and granulocytes remained below the barrier. Alternatively, a needle is used to aspirate the supernatant and transfer it to a fresh tube. The mechanical arms of the device opens and closes lids, dispenses PBS to aid in the collection of the mononuclear cells by centrifugation, and moves the tubes in and out of the centrifuge. Following centrifugation, the supernatant is poured off or removed by a vacuum device (E), leaving an isolated mononuclear cell pellet. Purification of the RNA from the cells is performed automatically, with lysis buffer and other purification solutions (F.) automatically dispensed and removed before and after centrifugation steps. The result is a purified RNA solution.

Please replace paragraph [0064] of US 2006/0088836 with the following amended paragraph:

Electrophoresis and microfluidics are used to assess the product of gene specific PCR primers. A. β-GUS gel image. Lane 3 is the image for primers F178 and R242. Lanes 2 and 1 correspond to the no-template control and –RT control, respectively.

Please replace paragraph [0065] of US 2006/0088836 with the following amended paragraph:

B. The electropherogram of β-GUS primers F178 and R242, a graphical representation of Lane 3 from the gel image.

Please replace paragraph [0066] of US 2006/0088836 with the following amended paragraph:

C. β-Actin gel image. Lane 3 is the image for primers F75 and R178. Lanes 2 and 1 correspond to the no-template control and –RT control, respectively.

Please replace paragraph [0067] of US 2006/0088836 with the following amended paragraph:

D. The electropherogram of β-Actin primers F75 and R178, a graphical representation of Lane 3 from the gel image.

Please replace paragraph [0070] of US 2006/0088836 with the following amended paragraph:

11 candidate control genes were tested using real-time PCR on 6 whole blood samples (PAX) paired with 6 mononuclear samples (CPT) from the same patient. Each sample was tested twice. For each gene, the variability of the gene across the samples is shown on the vertical axis (~~top graph~~ A). The average C_T value for each gene is also shown (~~bottom graph~~ B). 2 μg RNA was used for PAX samples and 0.5 μg total RNA was used for the mononuclear samples (CPT).